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OSM

Oregon
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August 17, 2001

Drew Gilpin
Manager of Environmental Services
Oregon Steel Mills
P.O. box 2760
Portland, Oregon, 97208

RE: **Pre-Remedial Investigation Work Plan Addendum**
Oregon Steel Mills, Portland, Oregon
ECSI File No. 141

Dear Mr. Gilpin:

Thank you for submitting the August 9, 2001 "Oregon Steel Mills Pre-Remedial Investigation Work Plan Addendum" prepared by Exponent. The Oregon Department of Environmental Quality (DEQ) appreciates Oregon Steel Mills (OSM) efforts to further investigate environmental issues identified at the site. DEQ has reviewed this work plan and has the following comments.

General Comments

A. Analytical Detection Limits. As a reminder, please confirm that the laboratory analytical detection limits for the proposed analyses are appropriate for evaluating the resulting data against the human and/or ecological risk-based screening values.

Specific Comments

Task 1. Soil Sampling in the Vicinity of the Former Transformer Storage Area

1. Depth of the Soil Samples. To clarify the rationale for proposed soil sample depths (based upon telephone conversation with Exponent) soil samples will be collected from either obviously stained soil, soil present immediately below any obvious previous excavation fill material, if present, or if no fill is observed, from 4 to 5 feet below ground surface (presumed to be below any previous excavation work in this area).

Task 2. Groundwater Sampling Downgradient from the Fueling Area

2. Based upon the information presented in the work plan, the proposed sampling locations and analytical methods are acceptable as a screening step to evaluate groundwater conditions in this area. However, the volatile organic compounds list should be expanded to include the other volatile constituents found in gasoline. The expanded volatile compounds in gasoline are identified in Appendix A of DEQ's September 1999 Guidance document, "Risk-Based

Decision Making for the Remediation of Petroleum-Contaminated Sites (RBDM)," and can be captured by running EPA Method 8260.

The use of TPH analysis as a screening tool is acceptable for the delineation of a documented release, however additional analyses may be needed to complete the assessment of potential risks posed by the release. For use as a screening tool the TPH detection limit is required to be equal to, or less than 0.5 milligrams per liter (mg/L).

Please note that due to the uncertainties or lack of data (such as recent groundwater well sampling data, recent flow direction data, conceptual site groundwater flow model, and exact TPH release locations (which should be a component of the soon to be completed Pre-RI/Preliminary Assessment document)), it is unclear if this proposed work is adequate to define the "presence or absence" of petroleum products in groundwater in this area.

Task 3. Soil Sampling in the Footprint of the Former "Paint Waste Ponds" Located at Surface Processing

3. Depth of the Soil Samples. To clarify the rationale for the proposed soil sample depths (based upon telephone conversation with Exponent), samples will be collected from paint-waste impacted soil. Based upon observation during shallow excavations in this area, obvious paint waste staining is present within the top 5 feet.

4. Analyte List. Include cadmium and manganese to the metals analyte list.

Task 4. Sediment Sampling from the Catch Basins Associated With Outfalls 001 and 003.

5. Based upon the stated objective for Task 4 the proposed sampling locations and analytical method are acceptable. A positive detection of polychlorinated biphenyls (PCBs) in the catch basin will assist with tracing a possible upland source of PCBs detected in the outfall sediment samples. However, a non-detection does not necessarily imply that PCB detections in the sediment sample are not potentially associated with historical OSM upland source(s).

6. Please clarify in the data report text why a PCBs concentration of 1.0 milligrams per kilogram (mg/kg) is used as the screening cut off for additional investigations. The current freshwater sediment PCBs risk-based screening value is 0.034 mg/kg (NOAA's Threshold Effects Levels (TELs)).

Task 5. Sediment Sampling from the Catch Basins Adjacent to the OSM Scrap Yard.

7. Analyte List. The analyte list is insufficient to meet the stated goal, to investigate the potential for TPH and metals to be transported from the OSM scrap yard to the Willamette River. Due to the nature of the operations at the facility, the metal analyte list needs to be expanded for this initial screening stage for sediments from the scrap yard storm water run-off. Attached is a table comparing metals analyzed in the electric arc furnace (EAF) Risk Assessment (RA) document (February 1998), the sediment sampling and scrap yard

sampling events. DEQ requests that OSM broaden the analytical list for sediment samples SD-4 and SD-5 to include eight additional metals.

In addition, the use of TPH analysis as a screening tool is acceptable if the TPH detection limit is at, or less than, 0.5 mg/L.

Task 6. Sediment Sampling from the Catch Basins Adjacent to the Mosely Shear

8. Please clarify, in the addendum data summary report, what the "local groundwater sump' refers to. Is it a low area where storm water run–off collects after a rain, or is this a man made structure that requires a permit?

9. Analyte List. The initial sentence for this task states the catch basin proposed for sampling collects run-off from both the surface processing and the Mosely Shear areas. Based upon the type of the operations occurring at the Mosely Shear (metal cutting/shearing), the proposed metal analyte list is insufficient to investigate potential for metals to be transported via the storm drain system. For this screening stage of the site investigation, broaden the metal analyte list at this sediment location to include metals identified for Task 5, (presented in the attached Table). The remaining suggested analyte list appears appropriate for this storm water sediment sample location.

Conclusions

DEQ approves of the Pre-RI Work Plan Addendum contingent upon the analyte list changes and comments presented in this letter. The following is a summary of the analyte list changes:

• Task 2	3 groundwater samples	Expand volatile list
• Task 3	2 soil samples	Add cadmium and manganese
• Task 5	2 sediment samples	Add 8 additional metals
• Task 6	1 sediment sample	Expand metals list to match that of Task 5

OSM can proceed with the field work as scheduled by incorporating DEQ's proposed modifications to the in the analyte list and written acknowledgement of this letter (email would be sufficient). Please contact me when the field work schedule is finalized. I would like to visit the site for a brief orientation, if possible, and observe a portion of the investigation activities.

Please feel free to call me with any questions or concerns at (503) 229-6915.

Sincerely,

Bruce Brody-Heine

Bruce Brody-Heine, R.G.
Project Manager
Voluntary Cleanup/Portland Harbor

cc: ECSI File No. 141
Rod Struck/DEQ VCPH
David Livermore/E²ponent

OREGON STEEL MILLS
DEQ Recommended Scrap Yard Metals Screening Level Sampling

Removed from list in discussion on 8/28/01 meeting

	23 Target Analyte List		Detected in EAF Slag (RA)	COI for EAF Slag RA	Detected in OSM Sediment Sampling	Detected in OSM Scrap Yard sampling	*WP Addendum Proposed List of Analytes - Task 5*	Screening Stage DEQ Recommended Analysis	Comments
1	Aluminum	Al	x	x (d)				x	Identified ecological COI from EAF RA, test for at screening level of investigatior
2	Antimony	Sb	x	x	nd			x	Identified COI from EAF RA, test for at screening level of investigation
3	Arsenic	As	x	(c)	x	x		x	Detected in both sediment and scrap yard
4	Barium	Ba	x	x (d)		x	x	x	Detected in scrap yard
5	Beryllium	Be	x	(c)	nd				Not detected in sediment samples
6	Cadmium	Cd	x	x	x	x		x	Detected in both sediment and scrap yard
7	Calcium	Ca	x	(b)					Essential nutrient, not hazardous substance
8	Chromium	Cr	x	x	x	x	x	x	Detected in both sediment and scrap yard
9	Cobalt	Co	x	(c)				x	Not tested for yet at site, test for at screening level of investigation
10	Copper	Cu	x		x	x	x	x	Detected in both sediment and scrap yard
11	Iron	Fe	x	(b)					Essential nutrient, not hazardous substance, yet may be toxic at high doses
12	Lead	Pb	x	(c)	x	x	x	x	Detected in both sediment and scrap yard
13	Magnesium	Mg	x	(b)					Essential nutrient, not hazardous substance
14	Manganese	Mn	x	x		x	x	x	Detected in scrap yard
15	Mercury	Hg	x	(c)	x	nd		x	Detected in sediment samples, test for at screening level of investigation
16	Nickel	Ni	x		x	x	x	x	Detected in both sediment and scrap yard
17	Potassium	K							Essential nutrient, not hazardous substance
18	Selelum	Se	x		nd	nd			Not detected in sediment or scrap yard samples
19	Silver	Ag	x		x	nd		x	Detected in sediment samples, test for at screening level of investigation
20	Sodium	Na							Ubiquitous, toxic at only very high doses
21	Thallium	Tl	x	(a)	nd				Infrequency of detection in EAF study
22	Vanadium	V	x	x				x	Identified COI from EAF RA
23	Zinc	Zn	x		x		x	x	Detected in sediment samples

Notes:
EAF = Electric Arc Furnce
EAF RA = Electric Arc Furnace Slag Risk Assessment (Februrary 1998, by ChemRisk)

a = low frequency of detection - screened out
b = essential nutrient - screened out
c = USA background concentration - screened out (not necessarily applicable in Oregon)
d = ecological receptors only